Training Notes



THE CULT OF ARMS

SoW Essential to Maintaining Ability to Wage Successful Wars

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Metaphor for Discussion

oday's armed forces have become fixated on technical or equipmentbased solutions to tactical problems. The Cult of Arms is excellence in the research, development and application of paramilitary and military science through soft technology. It is the Software of War (SoW) that is essential for maintaining the ability to wage successful wars of all types. The SoW is not software in the traditional application. It's not the

computer code required to run many advanced weapon systems but ideas on the application of weapons against an enemy. The SoW includes the methods, processes, techniques, and procedures that are performed in order for the hardware of war — weapon systems — to function and be employed on the battlefield. Without software, computers and weapons would be useless — objects with no utility.

The kernel or core of the SoW is a culture promoting professionalism, cohesion, mission-oriented command and control and hard realistic training. Tactics, techniques and procedures (TTPs) — the primary algorithms in the SoW — are methodologies, processes, and ways of thinking that the armed forces use to apply weapons on the battlefield. Through the minds of warriors, the code for the software of war is written and tested during training and proven in combat.

Evolution of Ground Warfare

The automatic machine gun and artillery fire were the primary dangers to infantry units during the early 20th century, and during WWI these weapons were difficult to move and were primarily stationary weapons. Such massive immobile firepower ensured that positional defensive warfare would dominate confined geographic areas such as the Western Front of WWI. The massive casualties and stalemate at the front forced military thinkers to find ways to effectively transition back to mobile offensive action. New tactics and weapons began to appear identifying two clear evolutionary paths in modern ground warfare.

The first is the equipment focus of the western methodology, clearly evident since WWI. Working off the premise that equipment saves men, western powers have historically put hardware ahead of software. The West's first response to any military problem or

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challenge is to develop a new piece of equipment. Traditionally unable to sustain substantial battlefield casualties, Western political leaders shy away from risky situations or methods and gravitate toward more predictable solutions. For example, using remote-controlled or autonomous vehicles of every kind in attritionbased tactical and operational techniques. In conventional battles, this methodology has proven successful; however, counterinsurgencies and low intensity conflicts,

it has opened another politically charged issue of collateral damage. Critical to an equipment-focused methodology is making weapons that are foremost effective but are also easy to use and maintain, reliable under field conditions, and producible in a sufficient quantity to make an impact on the battlefield.

The second is the methodology of tactical and operational prowess such as that employed by the German Army in WWI and WWII. The small Reichswehr was starved of every possible piece of equipment in the interwar period but evolved tremendously in the software of war. Working off the principle that sweat saves blood, the Germans developed modern combined arms organization with superior training, command and control and leadership, overcoming initial equipment inferiority. This is not to say that any army that is tactically proficient can overcome an enemy with superior weapons alone; it must also be comparably equipped. However, the equipment need not be the very best or latest that money can buy it; simply has to be good enough. Functional, rugged and reliable equipment in the hands of well-trained and motivated soldiers is the holy grail of success in battle. Weapons development and procurement in a software-focused military is led by tactical innovation where new weapons are designed supporting new techniques and solving specific problems with no methodological solution. Technological innovation follows as a matter of course through the primacy of the SoW; the Wehrmacht introduced the armored personnel carrier, assault gun, assault rifle and deployed the most feared crew-served machine guns and tanks.

Weapon systems have gotten more advanced, complicated and expensive to design, manufacture, and train with. The disposable M72 Light Anti-tank Weapon (LAW), rocket-propelled grenade (RPG) 26/27 and AT-4 are cheaper and easier to manufacture then



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guided missiles and are sufficient for destroying many battlefield targets. A perfect example of this is Soviet weaponry produced during and after World War II such as the T-34 tank, the PPSh-41 submachine gun, AK-47 assault rifle, and the RPG-7. Contrarily, the Wehrmacht introduced many new and very effective weapons whose efficacy could not be fully realized suffering from mechanical reliability issues under field conditions and complex engineering and manufacturing requirements; most notably the Mark-VI Tiger tank and the StG-44 assault rifle. Advances in less sophisticated weapons that are tough, reliable, cheap to manufacture and train with, and capable of sufficient battlefield performance will unlock the cult of arms.

Soldiers is the holy grail of success in battle.

The Cult of Arms

An organization's culture or work environment is critical for establishing the necessary norms and atmosphere for men to become warriors. Professionalism, unit cohesion, and command and control are the essential cultural aspects for creating warriors who can succeed in combat. The zero tolerance mantra of today is causing inexplicable damage to America's ability to wage war. Military bureaucrats will succeed in punching their ticket all the way to

mistakes can be either covered up or the service member hung out to dry depending on the repercussions felt by the individual's chain of command. This has also negatively affected training to the point that simple training injuries are no longer tolerable. This ridiculous situation is further compounded by the lack of credibility and respect the military profession has from society at large.

Professionalism — A profession is judged by the quality of those who choose to pursue it and the standards and requirements to enter, maintain membership and to excel within that profession. In spite of need, standards must never be compromised. The best of those in the armed forces, officers and NCO, must view their responsibilities as a sacred duty demanding tireless improvement, innovation, creativity and professionalism — total commitment. The military officer and NCO are the pinnacles of professionalism. They are entrusted with a sacred duty to build men out of the youngsters coming to them for military service. Entrusted with the ability to lead the nation's youth in life-threatening situations is the greatest responsibility anyone can be given. It is their duty to mentor and develop Soldiers into warriors as well as fine men. The selection, educational standards, training and promotion criteria of this cadre must be vigorous and based on ability, achievement and character. The military is not a welfare system providing a comfortable retirement

apply.

Core skills define a professional and his profession. The warrior's professional body of knowledge begins with infantry skills, tactics, weapons, and the ability to improvise, innovate, and exercise good judgment during the chaos of operations. How to conduct a military and paramilitary operation from inception through execution in all environments is critical. The military education emphasizes field operations advancing toward the command of larger units while including a mix of international assignments and academic study in branch specific knowledge. A warrior's civilian education must be technically focused on hard sciences and engineering. Modern weapons are increasingly complex offering many capabilities that must be understood completely if they are to be employed with maximum utility. From here, it is an open avenue for academic exploration focusing on strategy development through understanding politics and international affairs, national security issues, and the use of armed forces in world affairs.

The professional warrior must constantly seek self improvement involving physical, mental, and spiritual growth. Everything that can be of benefit to a military member and the growth of excellence under arms cannot be addressed through military training alone. This is where individual pursuit of art, literature, music, science, traveling and varied experiences provide the necessary interdisciplinary knowledge required for solving complex problems and growth as individuals. The human weapon is a warrior dedicated to the profession of arms; the art and science of armed conflict. It is being mentally and physically fit, an expert on the martial body of knowledge and possessing sufficient interdisciplinary knowledge broadening problem-solving abilities.

Unit cohesion and comradeship is created during training and solidified at the front forming lifelong bonds between warriors. It is the glue that holds an army together during the trials of war forging it into a mighty machine. The shared experiences of hard training, life at the front and soldierly honor (being able to rely on each other no matter what) forge the military primary group. In the Summer 1948 issue of The Public Opinion Quarterly, Edward A. Shils and Morris Janowitz state in their article "Cohesion and Disintegration in the Wehrmacht in WWII" that soldiers in the same squad, platoon and company form the military primary group, bound by the expectations and demands of that group. Warriors of the same unit that endured hard training felt great pride in their accomplishment which, is only surpassed when recognizing they're combat proficiency after successfully applying their skills at the front. This created a sense of membership to a proud organization that not just anyone could join. These proud warriors crave challenge and relish being the focal point of battle. Their strong sense of belonging and solidarity is intensified by sharing life at the front. The every day frontline experience is characterized by the misery of constant exposure to the elements, being unable to wash or get clean cloths, living with no personal privacy, filthy conditions without shelter, lack of adequate rest or food and the constant fear of being killed, having to kill, or failing ones comrades. Warriors can only endure this environment with the support of their comrades and faith in their leaders. As the executers of orders, company grade officers and NCOs are the link between a nation's battlefield intent and the action necessary to accomplish it. The leader's ability, military competence, and a sincere concern for his men's well-being creates trust. Units bound by comradeship — which Stephen G. Fritz describes in his book Frontsoldaten: The German Soldier in WWII as "loyalty, mutual obligation, willingness to sacrifice, pride, a sense of duty, even love..." felt between soldiers - would fight with great determination. Every effort should be made to keep men together in the same unit from recruit training through postdeployment retraining and redeployment. The same officers and NCOs that train a unit must lead it in combat and conduct retraining incorporating lessons learned at the front before the next frontline rotation.

Command and Control (C2)—An army's C2 apparatus is another vital aspect of military culture forming warriors into fast, flexible, and lethal teams. C2 is the overall command climate pervading an armed force for the direction of operations. It is a decentralized system allowing warriors to wage war with the outcome dependent on skill, leadership, and daring. C2 is the glue binding professionalism, unit cohesion, training, and TTPs together providing the environment where it all is allowed to work. Pivotal to this concept are mission-oriented orders and reconnaissance-pull.

A mission-oriented order system assigns goal- or intent-based orders rather than directive-based orders defining tasks and howto instructions. Operations embody what the Germans developed

in the interwar period called mission tactics. Commanders assign missions and objectives based on their desired battlefield result; they provide additional support as required but leave the details and tactics of accomplishing that desired end state to subordinate leaders. The basics of radio communication, hand and arm signals, flares, messengers and predetermined action queues all must be mastered in order for the on-scene commander to move his troops at the speed of thought when favorable or dangerous developments emerge during an engagement. Assigned objectives and axis of attack are sufficient controls during operations; the use of phase and boundary lines stifle momentum and limit tactical flexibility. Mission-oriented order systems create the norm of risk taking and responsibility for actions taken as well as the understanding of mistakes as learning points during training. Decision making is decentralized to company grade officers and senior NCOs with eyes on unfolding events, dangers, and opportunities. At critical points of main effort, more senior level commanders may be on scene pushing critical tasks with more resources and urgency, boosting moral.

Reconnaissance-pull (recon-pull) involves maximizing battlefield intelligence driving the orientation of the battle. In the field this concept uses recon units to probe for gaps in enemy lines or routes of approach and then "pull" friendly forces through these paths toward their objectives. Reconnaissance determines the axis of advance and can cause shifts in the main effort when dangers and opportunities are discovered. It is more than this field concept, however, revolving around the critical role of intelligence driving fighting forces. Recon-pull depends on a complete field intelligence system: identifying what is required, the means to collect it, analyzing it, the commander's ability to plan based on it and junior officers acting on it as well as a commitment to operational security. The more questions answered the better; however, this should not prevent operations from taking place. Combat will always be conducted with numerous unknowns and that is where innovative combat leaders with decentralized authority can capitalize on the opportunities presented. The system must be fast, accurate, and continuously working allowing constant battlefield updates. Mission-oriented order and recon-pull systems allow battlefield forces to strike at the enemy's weaknesses seizing the initiative, maintaining momentum, and providing adaptability. Decision making is made at the speed of thought where the action is taking place and the battle decided.

The Combined Arms Task Force (CATF) is the basic organizational structure for ground operations. Modern combat requires a mix of arms and weapons that through maneuver exploits the capabilities of each while protecting their weaknesses. Combined arm operations at battalion/company level and above employ infantry, tanks, artillery and aircraft in combination, using each arm's strength to engage the enemy while protecting each others' weaknesses from enemy action. Similarly, at company/platoon level and below, combined weapon methodology — a varied weapons mix of automatic weapons, rifles, pistols, grenade launchers, hand grenades, shoulder-fired rockets and missiles, demolition charges and man- and vehicle-portable crew-served weapon systems allows the infantry platoon, squad, or team the ability to engage and defeat a wider variety of targets and accomplish more missions then if they were armed with standard small arms alone.

The battle group should be about the size of a regiment/brigade. The modern division of close to 20,000 men is way too large and clumsy. Ideally 5,000-9,000 men should be built from various companies and batteries. Armor, infantry, artillery, assault guns, anti-aircraft weapons and helicopters are combined with sufficient logistical and engineer support for sustained operations. The companies would be formed into multiple reinforced battalion-sized elements, the CATF according to terrain and mission. The layers of inter arm support have been proven successful in combat throughout the 20th century. The mission-specific CATF has been the most successful combat formation because of its combined arms structure. adaptability to terrain and enemy situation, logistical independence and ability to integrate the varied formations necessary for mission accomplishment. Reinforced or regular company-sized elements building into the CATF will themselves be composed of similarly built assault groups (AG). The infantry fire team and vehicle or gun platoon/ section will supply the basic building block of this organizational structure enabling maximum flexibility across conflict types.

Leadership and the authority to command come from exemplary ability. They don't come from the uniform or from a rank or position but being an example in the field. Leadership is the process or art of influencing people to accomplish the mission because they want to not because they have to. It is also the ability to make on-the-spot decisions exercising professional knowledge and experience in fluid situations. This is accomplished through trust, mutual respect, innovation, and cohesiveness. Leaders must look after the physical and emotional needs of their Soldiers by creating a sense of belonging to a tight-knit family and judging them not by their rank, name, or honors but by their character and performance. They must be fair and treat everyone equally. Officers and NCOs must be duly considerate of their

Soldiers' lives and any loss of life under their command must be minimal and justified. Although rank gives them the authority to give orders, it does not make them a leader. People do not follow rank; they follow knowledge and good judgment. Building an effective team through leadership qualities such as values, character, fairness, trust, respect, and mentorship make elite units with the ability to accomplish any goal.

True leadership makes followers want to succeed and achieve great things while offering mentorship and the fruits of the leader's experience. True leaders take pride when their subordinates excel, inspiring trust. We must train our young officers and NCOs to be warfighters and leaders not bureaucrats. Bureaucrats excel at making checklists, Power Point slides and adding endless rules and procedures to control their subordinates. Severely lacking are the critical skills required to conduct high tempo operations under constantly changing circumstances. Initiative, trust, team building, taking responsibility and innovation become lost in the avalanche of paperwork, doing it by the book, self interest and pointing fingers when things go wrong. The zero-defect mentality creates leaders that are more afraid of making mistakes than they are of exercising initiative. How can leaders with this mentality win on the battlefield?

Making on-the-spot decisions during an engagement and thinking on your feet are the providence of leadership possessed by men of vigor, courage and strong character. Maintaining the initiative and uniting all available forces at the point of decision demands cool, competent, bold, imaginative and opportunistic leadership. Every officer, NCO and Soldier must be trained and competent exercising leadership at one or two grades above his peacetime rank.

Officer and NCO selection must be based on field abilities from the ranks of the enlisted or through an intensive officer preparation course for those entering through Reserve Officer Training Corps, Officer Candidate School or from a Service Academy. The gentlemen's officer corps is a thing of the past where a university education is required. A man's ability to command troops on the battlefield is determined by character and leadership. While being university educated is certainly



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Modified battle drill training seeks flexible responses to the most encountered battlefield situations.

desirable and may be required for some technical branches, it certainly is not for measuring a person's leadership ability in combat. Officer and NCO candidates should be selected from the ranks of the enlisted that show potential or enter through a special training program assessing their performance at various enlisted ranks before commissioning.

Training

The main objective of military training is developing proficiency in the tactics of conducting military operations enabled by suitable warrior culture. These methods are designed to enable outnumbered. outgunned, and technologically outclassed armies to prevail on the battlefield with minimal friendly casualties. An integrated training program must be tough and realistic stressing tactical flexibility and creativity through the use of mission-oriented orders, reconnaissance pull, modified battle drills, and mobile assault training. A complete training program understands that armies exist to wage war, and the product of any military training program must be competent warriors who are taught how to think not what to think. During times of war, constant reports from the front should help form the basis of future exercises and lessons learned should be incorporated as quickly as possible to warriors heading to the front. The program must focus on producing Infantrymen. The greatest military utility is achieved when all elements of a formation

can contribute combat power or raise the tooth-to-tail ratio when necessary. After attending basic combat training, I think there needs to be a light infantry course (LIC) all warriors attend before beginning branchspecific training.

Light Infantry Course

Light infantry is the foundation of all armed forces. They can operate in all types of terrain and conflict types. Insurgencies and counterinsurgencies are essentially battles between light infantry. Police forces are paramilitary light infantry units and the primary counterterrorism asset. They are also the cheapest units in terms of equipment requirements to form because men can only carry so much and still be effective in combat. This corresponding lack of heavy equipment forces the light infantry to be highly skilled. And that highly skilled infantry warrior is what is needed.

Operating Principles: Cascading Operability, Modified Battle Drills, Mobile Assault and Goal-Oriented Physical **Fitness**

Cascading Operability. First Soldiers must master individual military skills then integrate those skills into the two- and fourman team, the two fire-team squad, and finally into the assault group. These skills need to be trained and mastered over desert, forest, mountain, and urban terrain in all weather conditions. In the construct of the LIC, this training will take place in the terrain found at the location of the training facility with more specific environmental training taking place later. The training follows in sequence building upon previous knowledge and skills. For example, some tasks learned individually are then integrated within teams and squads. Movement under direct/indirect fire, each Soldier's place and responsibility in formations, using cover and concealment to move securely and stealthily are essential individual skills which must be integrated within team/squad capabilities. First aid also an individual task requiring team/squad integration when forming aid and liter teams during operations. Reacting to ambushes, indirect fire and contact, crossing danger areas and encountering IEDs are all team/squad tasks that build upon the warrior mastering his specific piece of the pie and being able to cover other pieces as casualties are incurred.

Modified Battle Drill. Standard battle drills are used as lecture tools and a foundation for experimentation. Modified battle drill training is a force-on-force exercise using a noticeable means of assessing casualties allowing trainees to track how well they are performing and where they need improvement. Speed, stealth and deception are used to measure a TTP's level of surprise while allowing constant improvement, optimizing a TTP's efficacy. TTPs experimentation must seek to limit friendly casualties providing a means for rapid battlefield action. American trainees are force fed doctrine and offered little or no latitude in experimentation for improving technique and the overall quality of tactical maneuvers. This is why Soldiers must be taught how to think and not what to think. Emphasis must be placed on a leaders' ability to make sound decisions appropriate for the tactical problem he faces. The mission must be accomplished as fast as possible and with as few casualties as possible preserving combat power for further operations; how that is accomplished is open to the leader's discretion. Modified battle drill training seeks flexible responses to the most widely encountered battlefield situations such as breaking contact, reacting to an ambush, crossing danger areas, hasty attack, meeting engagements and movement to contact.

Mobile Assault. Characterized by surprise, flexibility and rapid mission accomplishment mobile assault tactics revolved around the reconnaissance and combat patrol. Raids, ambushes, security and reconnaissance patrols must be practiced day and night focusing on achieving positional superiority over the enemy employing friendly weapon systems with maximum effect. The fundamentals of troop formations and movement utilizing cover and concealment, the effects of weather and terrain, communications, noise and light discipline, observation, detailed attack and withdrawal planning including main and alternate routes and redeployment in the event of unplanned contact; all geared toward flexible and decisive mission accomplishment. Critical to the successful mobile assault is the formation's ability to maneuver gaining positional superiority over the enemy accomplishing its mission with minimal friendly casualties.

Goal-Oriented Physical Fitness. Combat physical fitness goes beyond the standard calisthenics, running, and hiking by incorporating assault and obstacle courses. Effectiveness in combat is the goal of physical training with all activities designed to achieve this end. Pursuing a rigorous physical fitness program of calisthenics and running is the basis of any military fitness program; however, when preparing for combat, training in events that mimic the tasks to be performed under fire is a goal-oriented physical fitness program. These incorporate assault courses involving orienteering while negotiating obstacles and shooting exercises for time.

Course Phases

Individual Phase: This training phase focuses on the necessary individual warrior skills essential to successfully engaging enemy units. Warriors must become proficient in cross-country orienteering, weapons care, function and employment, camouflaging equipment and personnel, movement techniques utilizing cover and concealment under direct and indirect fire, tracking and stalking, communications (both visual signaling and radio operation), first aid, hand-to-hand self defense, advanced marksmanship, and demolitions. After establishing a solid shooting foundation, warriors move into walking combat shooting, first dry firing and ending with fast live-fire drills. This phase culminates with planning mobile assault operations in the classroom.

Team Phase: Tactical exercises begin with the issuance of the operations order or fragmentary order and are conducted at the terrain board. After the proper troop leading procedures are followed, the mission is executed at the terrain board as if the unit was in the field. Proper radio procedures are observed with the instructors acting as higher headquarters and introducing enemy contact, etc. From this point the combat shooting exercises are done in two-man teams, then four-man fire teams, and finally with a mixed weapon squad. Movement, communication, tracking and stalking techniques are refined and built upon as team and squad patrolling missions begin. Operational security becomes a religion as formations conduct reconnaissance and screening missions as well as ambushes and raids. Teams/squads are taught how to break contact, conduct hasty attacks, cross danger areas, plan assaults and other necessary TTPs. All unit positions are rotated allowing every warrior to learn the requirements of each position within the formation, which will develop leaderships skill and ensure the team will continue to function as casualties are taken.

Assault Group Phase: During this phase, warriors gather into mission-specific task forces up to reinforced platoon-size elements

for advanced patrolling operations and exposure to the use of combined arms. Including armor sections, assault guns and calling for and adjusting indirect fire and combat air support during offensive and defensive operations. Using direct-fire weapons in force-on-force exercises that produce a visible effect (such as paint balls) reinforces tactical necessities such as the need to find appropriate cover while moving. The AG conducts force-on-force engagements guided by the modified battle drill and mobile assault techniques where the standard TTPs will be tested and refined based on the operational results. Absolute freedom is allowed during these exercises combined with detailed after action reviews to determine what TTPs actually work in this simulated combat based on the combined arms standard and most current contemporary operating environment. Particular attention must be paid to maintaining the AG's cohesion during operations, while occupying an assembly area, and then quickly reorganizing for follow-on missions and preparing against counterattacks. The troops will learn and understand that in combat certain things are relative. For example, they will be aware of various troop formations such as the wedge and column and their place within those formations; however, they will learn that their position is more directed by terrain and available cover and concealment.

Tactics

TTPs are the soft technology created as ways of acting in and employing weapons in combat. Successful TTPs are often recorded in military doctrine, standardizing training and ensuring that warwinning methodologies are disseminated to the armed forces as a whole. Training and fighting from a standard doctrine was an outstanding concept in theory and very successful in practice for the Wehrmacht in between World Wars I and II. The doctrine should not stifle flexibility by being presented as the only right way of doing something. It should focus on concepts to guide warfighting TTPs, not dictate how things should be done. Concepts such as combined arms and mixed weapons, mission tactics, task force or battle group organization embodying decentralization, unit integrity, maneuver, intelligence and leadership stand as the pillars of warfighting. Using terrain board and field problems, combat leaders should be evaluated on tactical dilemmas not based on the textbook answer but on the soundness of the leader's assessment, judgment, and overall thought process.

Doctrine should be a bottom-up development process where officers are free to copy and experiment with TTPs from all over the world in force-on-force or terrain board simulations. They can then disseminate their findings to other officers and NCO discussing the merits of each maneuver. If the TTP can withstand further experimentation and peer review, the officer is obligated to publish it or otherwise pass it up the chain of command. This process is faster during war as effective TTPs are adopted regardless of what's written in doctrine. This doctrine development system also prevents units in the field from being predictable and allows situational uniqueness depending on the threat. Expanding on some of these concepts, it is evident how TTPs emerge from doctrine as guidance not law. Leadership is most effective when the leader is at the point of main effort employing creativity, improvisation, flexibility and initiative to operations; otherwise it's simply management. Maneuver relies on

the travelability of terrain, mobility allowed by a network of roads and highways and leadership yielding speed and surprise. Various techniques and procedures have proven themselves throughout history and are worthy of becoming doctrine, but they need to be broad enough to guide operations not dictate them. For example reconnaissance pull, deep penetration, timely counter attacks, suppression and volume of fire, coordinating fire and maneuver, reinforcing success, bold thrusts, and economy of force have been identified as pivotal aspects of many operations and provide the backdrop for the development of modern TTPs that are flexible and situational.

Focusing junior officers and NCOs on their primary responsibility of TTP development is necessary for them to learn their current positions while maintaining them in grade, which allows for mastery of the position. Company grade officers and NCOs seeking to become masters of their trade must first serve as apprentice and journeyman as part of a comprehensive combat leadership training and mentorship development program. Giving warriors just enough time to learn the basics of a job then

moving them out for other duties is counterproductive and part of the "ticket punching" mentality. Officers should perform three years as combat platoon leaders, not including training before becoming eligible for promotion. Captains should serve four years as line company commanders not including staff rotations. A series of tactical and operational competency examinations will also be given establishing eligibility for promotion once the prescribed time in grade is reached. Additionally, the total percentage of officers in the armed forces should not exceed six to seven percent.

Conclusion

Historically since the First World War the United States has maintained an attritionbased warfighting methodology. Attrition allows a nation capable of producing massive amounts of arms and equipment with sufficient population although operationally and tactically inferior to prevail in combat. The Soldiers of an attrition-based system need master few unsophisticated military skills. This methodology is based on bureaucratic control and predictability presenting little risk for commanders seeking a fall back protecting their career in a zero defect system. Maneuver warfare is riskier requiring leadership not management! The software of war must be up to the challenge if a comprehensive military system of operational and tactical excellence is desired. Armies focusing on software will only require weapons that are good enough to defeat a technologically advanced but tactically uninitiated enemy. This poses a serious threat for the United States as tactical proficiency continues to take a back seat to fancy new gizmos while our enemies focus on the SoW and have access to weapons that are good enough. Through the discussion of the critical elements in employing efficient and effective armed forces I hope to refocus priority where it should be, on the Software of War and dedication to the Cult of Arms.

At the time this article was submitted, 1LT Joseph P. Morsello had recently completed a 17-month assignment as an observer/controller/ trainer with the 189th Infantry Brigade, 1st Army East at Fort Bragg, N.C. He also previously served as an engineer equipment platoon leader supporting the 1-187th Infantry Regiment, 1st Brigade, 101st Airborne Division and the 3rd Armored Cavalry Regiment in northwestern Irag.



Soldiers explain small-team movement tactics to their Iraqi border security partners prior to conducting a partnered foot patrol along the Iraai-Svrian border at night, 9 December 2009.

SPC Mike MacLeod